Impact of a Personalized Decision Support Aid on Menopausal Women – Results from a Randomized Controlled Trial

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To improve menopausal counseling, we developed a computer-generated personalized menopause decision support aid (DSA) and measured its impact in a randomized, controlled trial. Results suggest that this DSA may help women make informed decisions about menopausal therapy, change their risk perceptions, and motivate behavioral change.

INTRODUCTION

Patients who actively participate in their medical care are more satisfied and have better clinical outcomes than those who do not.[1] Deciding which menopausal treatment, if any, to use is difficult for millions of menopausal women, one requiring a complex integration of personal risk factors, emerging scientific data, and patient preferences. We developed a computer-generated, personalized DSA, integrated it into clinical practice, and evaluated its impact on decision-making regarding menopausal therapy, the patient-clinician encounter, lifestyle changes, and preventive screening behaviors.

METHODOLOGY

The software includes published risk models[2] that provide women with personalized information about their risks for coronary heart disease, breast cancer, and osteoporosis, the expected impact of common treatments on these risks and on menopausal symptoms, and strategies for risk reduction. We tested this intervention among postmenopausal women in 4 clinical practices affiliated with Brigham & Women's Hospital (N=143, mean age=51.5). We achieved a 21% response rate to invitation letters sent to patients. Participants were randomized to control (receiving ACP guidelines; n=50), or 1 of 2 interventions: the DSA alone (n=44), or the DSA with one-on-one review with study staff, conducted just prior to the clinic visit (n=49). The DSA consisted of a lengthy printed personalized health report that was mailed to the patient after they completed a brief intake questionnaire about their lifestyle, family, and medical history. Evaluation was conducted just after their clinic visit, with follow-up (ongoing) at 6 months and 1 year.

RESULTS AND DISCUSSION

Responses to the DSA have been favorable. 51% reported having liked the DSA (vs. 16% of controls), 56% found the DSA useful (vs. 48%), 57% report it made them feel more in control of their health (vs. 48%), 42% indicate it helped them identify questions they wanted to ask their doctor (vs. 8%), and 35% feel it improved the quality of care they received from their doctor (vs. 18%). The personalized DSA changed patients' perceived risk for heart disease (54% vs. 6%), osteoporosis (54% vs. 4%), and breast cancer (57% vs. 4%). There were substantial differences between intervention and control rates of intent to change numerous health behaviors, including intent to perform breast self exams, eat a low fat diet, exercise more, quit smoking, reduce alcohol consumption, and undergo fecal occult blood tests and flexible sigmoidoscopy. Preliminary data suggests that there was no significant difference in responses to the intervention between those participants receiving only the printed DSA and those receiving the DSA plus one-on-one review.

These data suggest that a computer-generated, personally-tailored DSA may help women make informed decisions about menopausal therapy, improve quality of care, change their risk perceptions, and motivate healthy behavioral change. Integration of such a DSA into clinical practice need not include one-on-one review, thereby increasing generalizability and keeping implementation costs down.

Acknowledgements

This research was supported by a grant from the Robert Wood Johnson Foundation.

References

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